SMITH AND ABBOT, THE NATURAL HISTORY OF THE RARER LEPIDOPTEROUS INSECTS OF GEORGIA (1797): ITS AUTHORSHIP AND LATER HISTORY

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I. The problem of authorship

The first extensive monograph entirely devoted to North American entomology was a collaboration of Sir James Edward Smith and John Abbot, published at London in two sumptuous volumes with 104 coloured plates. The book, which is of considerable importance to taxonomists because of the number of species described, was based on materials sent to England by Abbot (1751-1840 or early 1841), a London naturalist skilled in entomology and ornithology who emigrated to the American colonies in 1773. His sponsors were "Dru" Drury and other leading English collectors, and he had the official sanction of the Royal Society of London, which approved of the young man's purpose of making "researches and collections in Virginia" (Drury Papers; Abbot, "Notes on my Life"; Legge to Murray, 4th August 1773). Abbot eventually settled in Georgia, and began to send well-set specimens and superior watercolours, chiefly of insects and related arthropods but also of birds, to naturalists in Britain and Europe. His early efforts reached Drury, Swederus, Hübner, Fabricius and many others, and figured extensively in Thomas Martyn's Psyche. But his best known contributions were to the Georgia book, edited by Smith (1759-1828), president of the Linnean Society of London.

The precise nature of this collaboration has been imunderstood by many authors, who have ascribed species named in the 1797 book variously to Abbot and Smith, Smith and Abbot, Abbot, and Smith. In brief, Smith received rough notes and coloured drawings, probably through the John Francillon, the London jeweller and entomological collector who was managing Abbot's British and Continental affairs at the time. The transaction must have occurred in 1793 or earlier, as the dated copperplates for the 1797 volumes (less than one-fourth of the plates are dated) were prepared in 1793, 1794 and 1795. Smith edited Abbot's notes, deleting and amending in the interest of economy and style. Abbot had furnished no scientific names or descriptions of new species, so that Smith had to identify the insects as well as he could by reference to printed works and actual Georgia specimens furnished by Abbot to the London cabinets, especially Francillon's, where Smith found examples of all of the Lepidoptera depicted on the drawings and mentioned in the notes. In the printed book, Smith was careful to set Abbot's

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edited notes apart from his own original contributions, which included the identifications and the descriptions of new species.

He explained what he had done in the Preface:

"The materials of the following work have been collected on the spot by a faithful observer, Mr. John Abbot, many years resident in Georgia, who, after having previously studied the metamorphoses of English insects, pursued his enquiries among those of Georgia and the neighbouring parts of North America. The result of his observations he has delineated in a style of beauty and accuracy which can scarcely be excelled, and has accompanied his figures with an account, as well as a representation, of the plants on which each insect chiefly feeds, together with many circumstances of its manners, times of the different metamorphoses, and other interesting particulars. For all such facts recorded in these pages the public are entirely obliged to Mr. Abbot. His memorandums, not methodized by himself for publication, have merely been digested into some sort of style and order by the editor, who has generally added remarks of his own, in a separate paragraph and different type from the rest; and who has entirely to answer for the systematic names and definitions: that department having been left altogether unattempted by Mr. Abbot" (Smith and Abbot, 1797, ii).

Although he did not have access to Abbot's rough notes, dos Passos (1958) accurately assessed the case for Smith's sole authorship of the names. Calling attention to Smith's statements in the book, dos Passos concluded that "both Abbot and Smith were responsible for parts of this work, the line dividing their respective responsibilities being sharply drawn and defined. Smith was an editor, insofar as editorial work was necessary," and he was also "author of the scientific names when he "... generally added remarks of his own . . . [and was] entirely to answer for the systematic names and definitions'," left altogether unat-tempted by Abbot. According to dos Passos, "this language brings the case completely within Article 21 of the Règles (Article 22 of the Bradley Draft), and results in ascribing all the scientific names to Smith, which in a check list would read 'Smith, 1797' but in a synonymy could properly be followed by 'in Smith and Abbot, 1797.' "

My examination of Abbot's notes, which are among Smith's papers at the Linnean Society of London, has revealed new evidence to substantiate Dr. dos Passos' arguments. The manuscript, titled "A Natural History of North American Insects. Particularly those of the State of Georgia," is exactly as characterized by Smith. Scientific description was indeed "unattempted," and Abbot's introductory statements make this quite clear: "As I intended the following, I think you may still publish it as a separate Work from any other you are at present engaged in. However if you think otherwise you may only mention my Name now & then You may therefore prune and trim what you please of the following rude Notes, I shall therefore not marshall them in any Order, take them as they occur. I have not pretended to describe them in any scientific manner, leaving that for you [r] superior Abilities" (f. 88r). Smith did indeed "prune and trim," his editorial work being easily traced on the manuscript and in the printed result. There can no longer be any question about Smith's sole responsibility for the names, and according to Article 50 of the Code he is the author. Article 51 (c) directs citation as "Smith, in Smith and Abbot."

II. The later history of "Smith and Abbot"

Until the end of his very long life, John Abbot continued to execute coloured drawings of the insects of Georgia, and there were attempts to expand or continue the 1797 book by publishing additional notes and plates. The first, in 1802 or 1803, was surely wrecked on the shoals of economics. John Francillon wrote to the Manchester silk and cotton manufacturer John Leigh Philips, an amateur entomologist who had been a recipient of Abbot's insects and watercolours, that "Mr Edward [s]" (J. Edwards, the principal publisher of the 1797 book), "is determined never to publish any addition, as I offered Him my Drawings three Years ago to publish an addition without any fee or reward, which He refused, saying He had lost money by the first, and would not undertake a Second part" (Francillon to Philips, 13th January 1806). The Abbot drawings once owned by Francillon are now preserved at the British

Museum (Natural History).

Another of Abbot's correspondents and customers, the naturalist William Swainson, wished to publish a continuation of the 1797 work. In his Taxidermy; with the Biography of Zoologists (1840), Swainson praised Abbot's work, remarking that "Another series of 103 subjects, not included in that which has been published, was executed for us, with the intention of forming two additional volumes to those edited by Dr. Smith: but the design is now abandoned" (pp. 99-100). The history of this transaction can at least be partially traced in the surviving Abbot-Swainson correspondence. On the 20th December 1816 Abbot wrote that "I have commenced making a set of Quarto (large size) Drawings of the changes of Insects with notes, of such Insects that are not figured in Smiths Lepidoptera Insects of Georgia, indeed it is a continuation of that Work [footnote: Except that I shall draw among them some of the other Genera of Insects']. I shall, I expect, be able to complete about 100 by the time I shall have your Collections of Insects ready to send You. I have always not have had less than 7s 6d sterling apiece for such Drawings, but I am willing to take 6s apiece for these. As I still continue to make new discoveries, I can very readily make at least 200 such Drawings not figured in Smiths work, among them is many of the principal Insects both for size & beauty."

Swainson replied on the 25th October 1817 that he would take a series of drawings of "all the species of Papilio and Sphinx which are not figured in Smiths work," provided that

Abbot could also furnish drawings of their metamorphoses and foodplants. Abbot executed the commission, and in the following spring was able to report, when conveying a collection of insects, that "I have likewise sent You under the Cork at the bottom of the box (being a false bottom) 104 Q [uarto] Drawings of the changes of the Insects of Georgia, making a 2d. Vol. to Smith" (Abbot to Swainson, 1st May 1818). But Swainson was dissatisfied with the results, replying on the 28th January 1819 that the drawings were not as highly finished as those used in the book; "but the greatest objection is that they are much smaller in size so that they can never be bound uniformly with that work."

Abbot promised a set in a larger format, but because of the loss of much of the later correspondence it is uncertain when these drawings were actually sent (or, indeed, how many sets of Abbot's drawings Swainson later received). For example, in his last known letter to Swainson, dated 10th June 1835, Abbot again reported shipment of a collection of insects, "and my book of Drawings of Insects, and about 650 Drawings of single Insects on small papers being all the Drawings of Insects at this time in my possession." Parkinson (1978) claimed that the set Swainson intended to publish was the "book of Drawings" mentioned in 1835, but he seems to have known only of Abbot's 1835 letter when interpreting the statement, and not the earlier correspondence and the long history of transactions between Abbot and Swainson. Parkinson reported a set of 103 drawings (originally 104, but one is lost) and Abbot's accompanying "Notes to the drawings of insects" in the Turnbull Library, Wellington, New Zealand, which is also the repository of the 1835 letter. He identified the set as the "book of Drawings," but the accuracy of his suggestion has not been determined. At any rate it is certain that no drawings sent to Francillon, Swainson or other known recipients were ever published as supplementary volumes to "Smith and Abbot."

But the copperplates used for the illustrations in the 1797 book did have a later history. A bound volume of a partial set of plates, now in the library of Dr. dos Passos, Mendham, New Jersey, U.S.A., provides evidence that at least some of the plates were altered and reprinted, and that others were reprinted without alteration, well into the nineteenth century. Evidently the dos Passos set, purchased some years ago from Wheldon & Wesley, represents examples of plates which had been reissued and were available in 1828 or shortly afterward, approximately three decades after original publication. The volume, which has no text, includes 73 of the 104 numbered plates, with one duplicate. The following notations describe those plates in the dos Passos set which have new imprints, dated watermarks, and other obvious differences:

Plate 1. New imprint at base, "Sold by R. Martin. Book & Printseller, 47. Great Queen Strt: Lincolns Inn Fields." Plate 6:

Martin imprint. Plate 9: as in 1797, but [Whatman] watermark, 1820. Plate 12: Martin imprint. Plate 13: as in 1797, but Whatman watermark, 1822. Plate 17: as in 1797, but Whatman watermark, 1821. Plate 18: Martin imprint. Plate 19: as in 1797, but Whatman watermark, 1822. Plate 20: as in 1797, but [Whatman] watermark, 1820. Plate 25: Martin imprint. Plate 32: Martin imprint. Plate 33: Martin imprint: [Whatman] watermark partially visible, apparently 1824. Plate 45: Martin imprint; [Whatman] watermark, 1828. Plate 46: Martin imprint. Plate 55: as in 1797, but Whatman watermark, 1822, Plate 61: Martin imprint. Plate 65: as in 1797, but [Whatman] watermark, 1820. Plate 84: as in 1797, but Whatman watermark, 1822. Plate 87: as in 1797, but Whatman watermark, 1821. Plate 98: as in 1797, but Whatman watermark, 1822. Plate 104: as in 1797, but Whatman watermark, 1821. Plates 40, 62 and 69 lack various words or numbers present on the 1797 plates; others differ in lesser degree; and some dos Passos plates are so severely trimmed that one cannot determine whether legends are deleted or merely cropped.

The remaining plates in the dos Passos set are unwatermarked or bear watermarks which are not complete enough to be dated. These plates are similar to those issued in 1797, but may well be printed on later paper as this differs from readily available copies of the 1797 publication, including Dr. dos Passos' complete copy of "Smith and Abbot." No further data

have been discovered about the R. Martin reprints.

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The Linnean Society of London has kindly granted me permission to reproduce John Abbot's "rough notes" in facsimile, to enable scholarly assessment of his precise contribution to the book. I am grateful to Dr. Cyril F. dos Passos for permission to examine and describe plates in his library, and to him and to Dr. F. Martin Brown and Dr. G. Scott Wilson for their advice during the course of my research.

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REPORT OF A PALE CLOUDED YELLOW: COLIAS HYALE L. AND OTHER MIGRANT LEPIDOPTERA IN IRELAND IN 1980. - 1 received a list of observations of Dutch migrants from one of our collaborators, Th. J. Blokland, Jagersstraat 4, 2266 AT Leidschendam, Holland, and at the end he had added a few which he had seen during a trip through the south of Ireland in August 1980, and among them was hyale! They are: Vanessa atalanta, L., Lemlara, Co. Cork, 17. viii(1), 31. viii(2); Avoca, Co. Wicklow, 19. viii(2); Ashford, Co. Wicklow, 21. viii(8); Glendalough, Co. Wicklow, 21. viii(2). Cynthia cardui L., Lemlara, 7. viii(1), 10. viii(1). Colias hyale L., Lemlara, 31. viii(1). Scotia ipsilon Hufn., Lemlara, 31. viii (1 at light).—B. J. LEMPKE, Instituut voor Taxonomische Zoologie, Plantage Middenlaan 64, 1018 DH Amsterdam, Holland. [Baynes Revised Catalogue of Irish Macrolepidoptera (1964) states there have been no reliable records of C. hyale in Ireland since 1868, so it occurred to us that Mr. Blokland's Colias might have been a pale form of C.croceus Geoff., which species was reported from Ireland in 1980. We wrote to Mr. Lempke accordingly, and his reply contains the following translation of a letter to him from Mr. Blokland: "I am very sorry, but I do not possess the specimen. At that moment I had no net at my disposal. It is however certain, that it was not the helice form of croceus, as this form only occurs with the much more robust female, and which moreover has a much paler ground colour than hyale. I could clearly see that at the moment when the butterfly settled on the flowers of Hieracium. The resemblance to australis is of course much closer, but I think I am quite certain it was hyale, because of the rather small round spot on the underside of the hind wing".—EDITOR.1